

**ABSTRACT**

A coal-fired power generation system including means for the production of coal-derived gas and a filter system for the filtration of this coal-derived gas. The filter system comprises at least one high temperature and corrosion resistant filter. The filter is made from a Fe-Cr-Al based alloy further comprising at least one additional element selected from the group consisting of Sc, Y, Ti, Zr, Hf, V, Nb, Ta and the lanthanides.